

DECLARATION AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

A HIGH THROUGHPUT BIOLOGICAL HEART RATE MONITOR THAT IS MOLECULARLY DETERMINED

	ĮVIO	MITOR THAT IS MOLI	COLINET DETERMIN	<u> </u>	
the specificat	ion of w	vhich			
(check one)		is attached hereto.			
	<u>.X</u>	was filed on July 3, 20	001		as
	Applie	cation Serial No. 09/898	,417		
	and w	as amended on	C 1' 1 1 N		·
		(1	f applicable)		
•			derstand the contents of d by any amendment refe	•	ntified
•	to be m		Patent and Trademark Odefined in Title 37, Code		
or Section 36 365(a) of any the United St or inventor's	55(b) of PCT In ates, list certific	any foreign application(s aternational Application wated below. I have also ide	Fitle 35, United States Code) for patent or inventor's which designated at least or entified below any foreign Application having a filing claimed:	certificate or Some country other application for	Section er than patent
Prior Foreign	n Applio			Priority Clai	
<u>Number</u>		<u>Country</u>	Filing Date	<u>Yes</u>	<u>No</u>
<u> </u>	_				

I hereby claim the benefit under Title 35. United States Code, Section 119(e) of any United States provisional application(s) listed below:

Provisional Application No.	Filing Date	<u>Status</u>

I hereby claim the benefit under title 35, United States Code, Section 120 of any United States Application(s) or Section 365(c) of any PCT International Application(s) designating the United States listed below. Insofar as this application discloses and claims subject matter in addition to that disclosed in any such prior Application in the manner provided by the first paragraph of Title 35. United States Code, Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations Section 1.56 which became available between the filing date(s) of such prior Application(s) and the national or PCT international filing date of this application:

Application Serial No.

Filing Date

Status

09/875,392

June 6, 2001

Pending

And I hereby appoint

John P. White (Reg. No. 28,768; Christopher C. Dunham (Reg. No. 22,031); Norman H. Zivin (Reg. No. 25, 385); Jay H. Maioli (Reg. No. 27,213); William E. Pelton (Reg. No. 25,702); Robert D. Katz (Reg. No. 30,141); Peter J. Phillips (Reg. No. 29,691); Wendy E. Miller (Reg. No. 35,615); Richard S. Milner (Reg. No. 33,970); Robert T. Maldonado (Reg. No. 38,232); Paul Teng (Reg. No. 40,837); Richard F. Jaworski (Reg. No. 33,515); Pedro C. Fernandez (Reg. No. 41,741); Gary J. Gershik (Reg. No. 39,992); Spencer H. Schneider (Reg. No. 45,923); Alan J. Morrison (Reg. No. 37,399); Alan D. Miller (Reg. No. 42,889); Christopher M. Ries (Reg. No. 45,799) and Frank Bruno (Reg. No. 46,583)

and each of them, all c/o Cooper & Dunham LLP of 1185 Avenue of the Americas, New York, New York 10036 (Tel. 212 278-0400), my attorneys, each with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, to transact all business in the Patent and Trademark Office connected therewith and to file any International Applications which are based thereon under the provisions of the Patent Cooperation Treaty.

Please address all communications, and direct all telephone calls, regarding this application to

John P. White			
Cooper & Dunham LLP			
1185 Avenue of the Americas			
New York, N.Y. 10036			

_____Reg. No. 28,678

Declaration	and	Power	of	Attorney
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I hereby declare that all statements made herein of my ov	wn knowledge are true and that all
statements made on information and belief are believed	to be true; and further that these
statements were made with the knowledge that willful false	statements and the like so made are
punishable by fine or imprisonment, or both, under Section	ion 1001 of Title 18 of the United
States Code and that such willful false statements may jeopa	ardize the validity of the application
or any patent issued thereon.	
, , , , , , , , , , , , , , , , , , ,	

Full name of sole or first joint inventor Michael R. Rosen
Inventor's signature
Citizenship U.S.A. Date of signature (0-)8-0/
Residence 25 East 86th Street, Apt. 14C, New York, New York 10028
Post Office Address <u>same as above</u>
Fost Office Addresssame as accept
Full name of Joint Inventor (if any) Richard B. Robinson
Inventor's signature Ruckeard B Robertsur
Citizenship U.S.A. Date of signature 10/5/01
Residence 67 Roosevelt Street, Cresskill, NJ 07626
Post Office Address <u>same as above</u>
Full name of Joint Inventor (if any) Ira S. Cohen
Inventor's signature
Citizenship Date of signature
Residence
Post Office Address
Full name of
Joint Inventor (if any) Han-Gang Yu
Inventor's signature
Citizenship Date of signature
Residence
Post Office Address



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ne specificat	ion of which				
check one)	is attached	hereto.	•		
٠.	X was filed o	onJuly 3, 2001			
<i>:</i>	Application Seria	l No. <u>09/898.417</u>			
	and was amended	on(if ap	plicable)		
specification		uis, as amonece o	d Tendemark	Office all infor	ma
specification I acknowled known to m Section 1.50	ge the duty to discle to be material to p	ose to the U.S. Patentability as defi	atent and Trademark ned in Title 37, Cod	Office all infor e of Feral Regul	ma latio
I acknowled known to m Section 1.50 I hereby cla or Section 365(a) of at the United	ge the duty to disclet to be material to p. 6. im foreign priority less (b) of any foreign priority less (c) PCT International States, listed below.	ose to the U.S. Patentability as definentiability as definentiation application which I have also identify International A	atent and Trademark ned in Title 37, Cod e 35, United States Cor or patent or inventor th designated at least fied below any foreign pplication having a f	Office all inforce of Feral Regulation of Section 119 one country of application for	ma lation
I acknowled known to m Section 1.50 I hereby cla or Section 365(a) of at the United or inventor the earliest	ge the duty to discle to be material to position. im foreign priority logo process of the position of the process of the position of the posi	ose to the U.S. Patentability as definentiability as definentiation application which I have also identify International A	atent and Trademark ned in Title 37, Cod e 35, United States Cor or patent or inventor th designated at least fied below any foreign pplication having a f	Office all inforce of Feral Regulation of Section 119 one country of application for	ma lation Seconder or pa e th

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		•

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John P. White

Reg. No. 28.678

Cooper & Dunham LLP 1185 Avenue of the Americas New York, N.Y. 10036 Tel. (212) 278-0400

or any patent issued thereon.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application

Full name of sole or first joint inventor Michael R. Rosen	· .
Inventor's signature	·
Citizenship U.S.A.	Date of signature
Residence 25 East 86th Street, Apt. 14C, New York	
Post Office Address same as above	
Full name of Joint Inventor (if any) Richard B. Robinson	
Inventor's signature	
Citizenship	_ Date of signature
Residence	
Post Office Address	
Full name of Joint Inventor (if any) Ira S. Cohen	· · · · · · · · · · · · · · · · · · ·
Inventor's signature	
Citizenship	
Residence	
Post Office Address	
Full name of	
Joint Inventor (if any) Han-Gang Yu	
Inventor's signature 26 75	
Citizenship P.R. China	Date of signature
Residence 15 Hollow Road, stony Br	00R, NY 11780
Post Office Address	



DECLARATION AND POWER OF ATTORNEY

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A HIGH THROUGHPUT BIOLOGICAL HEART RATE MONITOR THAT IS MOLECULARLY DETERMINED

the specification (check one)	of which		
(check one)	is attached hereto.		
_ <u>X</u>	was filed on July 3	, 2001	as
A	oplication Serial No. 09/8	398,417	
an	d was amended on	(if applicable)	
		understand the contents on nded by any amendment ref	
		U.S. Patent and Trademark as defined in Title 37, Code	
or Section 365(b 365(a) of any PC the United States or inventor's cer	of any foreign application Tinternational Application listed below. I have also	er Title 35, United States Co on(s) for patent or inventor' n which designated at least identified below any foreign onal Application having a fil- v is claimed:	s certificate or Section one country other than application for patent
Prior Foreign Ap Number	oplication(s) <u>Country</u>	Filing Date	Priority Claimed Yes No

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Provisional Application No.	Filing Date	<u>Status</u>

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Filing Date

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June 6, 2001

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John P. White

_Reg. No. 28.678

Cooper & Dunham LLP 1185 Avenue of the Americas New York, N.Y. 10036 Tel. (212) 278-0400 Tull name of sale or

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

first joint inventor Michael R. Rosen		
Inventor's signature		
Citizenship U.S.A.	_ Date of signature	·
Residence 25 East 86th Street, Apt. 14C, New York	k, New York 10028	
Post Office Address <u>same as above</u>		
Full name of Joint Inventor (if any) Richard B. Robinson	· · · · · · · · · · · · · · · · · · ·	
Inventor's signature		
Citizenship	Date of signature _	
Residence	•	
Post Office Address	· · · · · · · · · · · · · · · · · · ·	
Full name of Joint Inventor (if any) Ira S. Cohen		
Inventor's signature	•	1. 1 -1.1
Citizenship USA	_ Date of signature _	10/25/01
Residence 23 Hawks Nest Rd.		"_M.vī
Post Office Address Stony Brook N.Y.	11790	•
Full name of Joint Inventor (if any) Han-Gang Yu		
Inventor's signature		
Citizenship	-	
Post Office Address		
FON COURS AUGUESS		

Attorney's Jocket No. <u>65219-A/JPW/PJP</u>
unt or Patentee: Michael R. Rosen et al.
.al or Patent No.: 09/898,417
iled or Issued: July 3, 2001
Piller Invention or Patent: A HIGH THROUGHPUT BIOLOGICAL HEART RATE MONITOR THAT IS MOLECULARLY DETERMINED
VEDIFIED STATEMENT (DECLARATION) CLAIMING
VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS UNDER 37 C.F.R. §1.9(f) AND §1.27(d) - NONPROFIT ORGANIZATION
JAN 0 3 2002 S SMALL ENTITY STATUS UNDER 37 C.F.R. \$1.9(f)
AND 91.27(u) - NOINI KOMI OKOANIZATION
Thereby eclare that I am an official empowered to act on behalf of the nonprofit organization identified below:
Name of Organization: <u>THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK</u>
Address of Organization: 110 Low Memorial Library, West 116 th & Broadway
New York, New York 10027
THEW TOTAL THEW TOTAL TOTAL
TYPE OF ORGANIZATION:
X UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION
TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE 26 U.S.C. §§501(a) and 501(c)(3)
NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STĂTE ÒF THE UNITED
STATES OF AMERICA
NAME OF STATE:
CITATION OF STATUTE:
WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE 26 U.S.C.
§\$501(a) and 501(c)(3) IF LOCATED IN THE UNITED STATES OF AMERICA WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF
WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF
STATE OF THE UNITED STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF
AMERICA
NAME OF STATE:
CITATION OF STATUTE:
I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as
defined in 37 C.F.R. 1. 9(e)b for purposes of paying reduced fees under 35 U.S.C. §§41(a) and 41(b),
with regard to the invention entitled
A HIGH THROUGHPUT BIOLOGICAL HEART RATE
MONITOR THAT IS MOLECULARLY DETERMINED
by inventor(s) Michael R. Rosen, Richard B. Robinson, Ira S. Cohen and Han-Gang Yu
described in:
described in.
the specification filed herewith
<u>X</u> application S.N. <u>09/898,417</u> filed <u>July 3, 2001</u>
patent no. issued
puteru no. tobucu
I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit
organization with regard to the above identified invention.
If the rights held by the nonprofit organization are not exclusive, each individual, concern or
organization having rights to the invention is listed below a and no rights to the invention are held by any
person, other than the inventor, who could not qualify as a small business concern under 37 C.F.R.
$\S1.9(d)b$ or as a nonprofit organization under 37 C.F.K. $\S1.9(e)b$.
Name:
Address:
Individual Small Business Concern <u>X</u> _Nonprofit Organization

^a NOTE: Separate verified statements are required for each named person, concern, or organization

acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. 37 C.F.R. \$1.28(b)*

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name of Person Signing: <u>Michael J. Cleare, Ph. D.</u>	3		s an ech	eu.
Title In Organization: <u>Executive Director</u>		· ·		
Address: Columbia Innovation Enterprise, Columbia University,	Enginee	ering Terrac	e - Suite	2 363
Amsterdam & 120th Street, Now York, NY 10027				
Signature:				
Date of Signature: \tag{\tau_{\mu}}	,			· · · · · · · · · · · · · · · · · · ·

	Patentes Micha	Attorney's L'ocket No. <u>65219-A/JPW/PJP</u>		
·	Patentee: <u>Micha.</u> Patent No.: <u>09/898,41</u>	- A		
	or Issued: July 3, 2001			
		OGICAL HEART RATE MONITOR THAT IS MOLECULARLY DETERMINED.		
JINI	VERIFIED STATEMENT SMALL ENTITY STATE AND §1.27(d) - NONI			
ENT &	Inhereby declare that I am an official empowered below:	to act on behalf of the nonprofit organization identified		
	Address of Organization: P.O. BOX 9			
	Albany, New York 1220	71-0009		
•	TYPE OF ORGANIZATION:			
3	NONPROFIT SCIENTIFIC OR EDUCATIC STATES OF AMERICA NAME OF STATE:	TIF SFRVICE CODE 26 H.S.C. 885HHa) and DULCHI		
	\$\$501(a) and 501(c)(3) IF LOCATED IN T WOLLD OLIALIFY AS NONPROFIT SCIL	THE UNITED STATES OF AMERICA ENTIFIC OR EDUCATIONAL UNDER STATUTE OF		
	I hereby declare that the nonprofit organization i defined in 37 C.F.R. 1. 9(e)b for purposes of po with regard to the invention entitled	dentified above qualifies as a nonprofit organization as tying reduced fees under 35 U.S.C. $\S\S41(a)$ and $41(b)$,		
	A HIGH THROUGHPU MONITOR THAT IS M	REVENUE SERVICE CODE 26 U.S.C. §§301(a) and 301(c)(3) ICATIONAL UNDER STATUTE OF STATE OF THE UNITED PT UNDER INTERNAL REVENUE SERVICE CODE 26 U.S.C. ED IN THE UNITED STATES OF AMERICA IT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF OF AMERICA IF LOCATED IN THE UNITED STATES OF Ization identified above qualifies as a nonprofit organization as ses of paying reduced fees under 35 U.S.C. §§41(a) and 41(b), UGHPUT BIOLOGICAL HEART RATE AT IS MOLECULARLY DETERMINED ard B. Robinson. Ira S. Cohen and Han-Gang Yu Let or law have been conveyed to and remain with the nonprofit lentified invention. organization are not exclusive, each individual, concern or in is listed below and no rights to the invention are held by any muld not qualify as a small business concern under 37 C.F.R. under 37 C.F.R. §1.9(e)b.		
	by inventor(s) <u>Michael R. Rosen, Richard B. R</u> described in:	obinson, Ira S. Cohen and Han-Gang Yu		
	the specification filed herewith X application S.N. 09/898,417 filed July 3, 20 patent no. issued	<u>01</u>		
:	I hereby declare that rights under contract or law organization with regard to the above identified	w have been conveyed to and remain with the nonprofit invention.		
Ÿ.	organization having rights to the invention is list person, other than the inventor, who could not §1.9(d)b or as a nonprofit organization under 3 Name: Address:	ed below and no rights to the invention are neta by any qualify as a small business concern under 37 C.F.R. 7 C.F.R. §1.9(e)b.		
	Individual Small Business Concern	Nonprofit Organization		
	having rights to the invention averring to their	uired for each named person, concern, or organization status as small entities. 37 C.F.R. §1.27.		
	^b See reverse side.			

5.03 1:

1 74

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Title In Organization; Address:	RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW	YORK
Adaress:	Albany, New York 12201-0009	
Signature:	1/12/01	The section of the se
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